

ELECTRICAL STIMULATOR

# ELECTRICAL STIMULATOR INSTRUCTION MANUAL





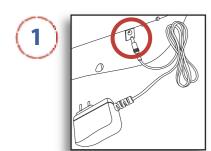
# QUICK START GUIDE

# CONTENTS



For detailed operation of your ElectroFlex<sup>™</sup> Circulation Massager Electrical Stimulator please refer to the comprehensive instructions within this manual.

To use ElectroFlex immediately follow this 5 point quick start guide.



Remove your ElectroFlex Circulation Massager from the packaging. Connect the DC adapter to a suitable mains outlet and plug the small DC socket into the device.



Turn on the power the central display will light up blue for 2-3 seconds and then turn off again, this is normal. Hold down the central power switch for 3-4 seconds. The main display will light up blue and remain on.





Remove your footwear and socks or stockings. Your feet need to be completely bare to experience the ElectroFlex micro current stimulation massage therapy.



There are 10 different treatment programmes, each offering a range of micro-current massage therapies. Select a number from 1 - 10 by pressing the **P+** and **P-** buttons. We suggest you try all 10 over time to decide which best suits you.





Sit in a comfortable chair. Place your bare feet on the left and right foot plates. Increase the intensity levels for each foot by pressing the  $\sim$  to increase the intensity and  $\sim$  to decrease for BAND 1. The intensity level ranges from 0 to 40, slowly increase the level until you begin to feel the micro-current stimulation.

For a full explanation of setting the intensity refer to page 13.

For more information about BioEngergiser Products visit our website at: www.bioenergiser.com



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# IMPORTANT SAFETY INFORMATION



- 1. Please read these instructions thoroughly before use.
- 2. Please check that you have all of the component parts as detailed in this user manual.
- 3. Take all parts out of the plastic bags and examine them to familiarise yourself with the components.



#### **Notes on Safety**

The icons and warning signs are indicated here for your safety and correct usage of the product as well as to prevent injuries and/or damage to properties.

The icons and meanings are as follows:

#### **Examples of Icon**



This icon means prohibited (must not do). Anything prohibited is marked clearly with this warning symbol.



This icon indicates something that is compulsory (must be observed). Compulsory actions are marked clearly with this warning symbol.



This product should not be used by persons with electronic medical implants, e.g. heart pacemakers, organ transplant or other electronic life support systems.



Disposal of this product and used batteries should be carried out in accordance with the should be carried out in accordance with the national regulations for the disposal of electronic products. Directive 2002/96/EC(WEEE)



Consult instructions for use



M Date of manufacturer



Manufacturer's name



**LOT** Batch Code



**EC REP** Authorised representative in the European Community.



Class II equipment



Caution, consult accompanying documents



Type BF applied Part



This symbol means serial number which is on the underside of the device and on the packaging.



**C€**<sub>0473</sub> CE Mark: conforms to essential requirements of the Medical Device Directive 93/42/EEC

#### **Danger**



This unit must not be used in combination with the following medical devices:

- Internally transplanted electronic medical devices, e.g. pacemakers
- Electronic life support equipment, such as respirators
- Electronic medical devices attached to the body, such as electrocardiographs

Using this unit with other electronic medical devices may cause erroneous operation of those devices.

#### Warning



Persons with the following conditions must consult the doctor before using this unit:

- Acute disease
- · Malignant tumor
- Infectious disease
- Pregnancy
- Cardiac dysfunction
- High fever
- Abnormal blood pressure
- Skin sensory disorders or skin problems
- Receiving medical treatment, especially those feeling discomfort

#### May cause an accident or ill health.

Should not be used by persons in the first trimester of pregnancy, fitted with a pacemaker or AICD, or being treated for an existing deep vein thrombosis



Do not use this unit near the heart, above the neck, on the head, around the mouth or on diseased skin.

#### May cause an accident or ill health.

Application of electrodes near the thorax may increase the risk of cardiac fibrillation.

Do not use this unit simultaneously with other therapeutic devices or in combination with ointments including spray type ointments.

#### May cause discomfort or ill health.

Simultaneous connection of a PATIENT to h.f. surgical EQUIPMENT may result in burns at the site of the STIMULATOR electrodes and possible damage to the STIMULATOR.

Operation in close proximity (e.g. 1 m) to a shortwave or microwave therapy EQUIPMENT may produce instability the STIMULATOR output.

Do not use this unit for purposes other than treatment indicated in this manual. May lead to accident, problems, or failure of the unit.

Do not insert the electrode cord plug into any place other than the electrode cord jack of the main unit. May cause an electric shock or accident.



Do not disassemble or remodel this unit.

May cause fire, dysfunction, or accident.

#### **Caution**



If the unit is not functioning properly or you feel discomfort, stop using the unit immediately.

If you feel any problems with your body or skin, consult your medical practitioner and follow their instructions.

If you want to move the Electrode Pad to another region or your body during treatment, be sure to turn off the power. If not, you may receive a strong electrical shock.

Do not try to attach the Pads to any other person during the treatment. You may receive strong electrical shock.

Do not start treatment while wearing an **electronic device.** The settings and timings of the device may be affected.

Do not use in the presence of flammable anaesthetic gas mixture with air, oxygen or nitrous oxide.







### IMPORTANT SAFFTY INFORMATION





Do not use this unit on infants or people not capable of expressing the state of expressing the state of the state of expressing the expression of expression capable of expressing their intentions. May cause an accident or ill health.

> Do not use this unit in places with high humidity such as bathrooms or while taking a bath or shower. You will receive a strong electrical shock.

> Do not use this unit while sleeping. The main unit may develop a malfunction, or the pad may move to an unexpected region and cause ill health.

Do not use this unit while driving. Receiving sudden strong stimulation may lead to traffic accident.

Do not leave the Electrode Pad attached to the **skin after treatment.** Prolonged attachment may cause skin irritation or infection.

Be careful not to allow any metal object, such as a belt buckle or necklace to come into contact with the Electrode Pad during treatment. You may receive a strong electrical

Do not use cellular phones or other electronic devices near this unit.

Do not use this unit to treat one region for a long time (more than 25 minutes). The muscles of the region under treatment may become exhausted and may cause poor physical condition.

Put the Electrode Gel Pads only on skin or on the plastic protector to avoid damage of the adhesive surfaces of the pads.

#### **Correct Disposal of This Product (WEEE Waste Electrical and Electronic Equipment)**

This marking shown on the product or its literature, indicates that it should not be disposed of, with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

This product does not contain any hazardous substances.

Disposal of used batteries should be carried out in accordance with the national regulations for the disposal of batteries.

#### Important information regarding Electro Magnetic Compatibility (EMC)

With the increased number of electronic devices such as PC's and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation. Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the EN 60601-1-2: 2001+A1:2006 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

This medical device manufactured by TV Products HK Ltd. conforms to this EN 60601-1-2: 2001+A1:2006 standard for both immunity and emissions.

#### Nevertheless, special precautions need to be observed:

Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation.

Recommendation is to keep a minimum distance of 7m. Verify correct operation of the device in case the distance is shorter.

BE109 needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the **ACCOMPANYING** DOCUMENTS.

Portable and mobile RF communications equipment can affect BE109.

**WARNING** that the use of accessories, transducers and cables other than those supplied with the exception of the transducers and cables sold by the manufacturer of the BE109 as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of BE109.

WARNING that BE109 should not be used adjacent to or stacked with other equipment.





# WHAT IS ELECTRONIC NERVE STIMULATION?

# MACHINE OVERVIEW AND PART NAMES



#### **INTENDED USE: Medical Purpose**

This Electrical Stimulator is intended to be used as a muscle stimulator to relieve (muscle) pain, increase blood circulation, relax stiffness muscles, reduce swollen feet and ankles and fatigue. The massaging effect is achieved by electronic stimulation of the nerves through electrode pads placed on the skin or through the foot plates. Various massage regions and treatment programs can be selected.

**Suitable Users:** Please read "Notes on safety" before using the unit. (This unit should not be used by people prohibited from doing so in "Notes on safety".).

**Environment:** This unit is intended for home use only.

**Effectiveness:** Massage relief of (muscle) pain, stiffness and fatigue.

**Precautions for use:** Please read "Notes on safety" before using the unit.

Electronic Nerve Stimulation is a non-invasive, safe nerve stimulation intended to reduce pain. The ElectroFlex Circulation Massager uses proven neuromuscular electrical stimulation therapy to send micro current pulses through the soles of your feet. This type of electrical stimulation is clinically proven to be safe and effective and can be carried out in the comfort of your own home. The ElectroFlex Circulation Massager improves muscle function by stimulating nerves increasing the flow of blood helping to reduce PAIN, SWELLING, TIRED AND ACHING LEGS

#### **Medical Purpose**

This Electrical Stimulator is intended to be used as a muscle stimulator to relieve(muscle) pain, increase blood circulation, relax stiff muscles, reduce swollen feet, ankles and relieve fatigue. The massaging effect is achieved by electronic stimulation of the nerves through electrode pads placed on the skin or through the foot plates. Various massage regions and treatment programs can be selected.

To obtain a correct treatment you have available 10 treatment programs (see table below). A treatment program runs for 25 minutes

Mode	Complaint	Program	Effect  Different vibrations promote blood circulation and relieve fatigue	
1	Stiff shoulders	Tapping massage		
2	Swelling and foot fatigue	Prickly massage	Different stimulation promote circulation of blood and body fluid in the feet	
3	Acute Pain	Combined massage	High frequency vibrations relieve acute pain promptly	
4	Acute elbow or knee pain	Pulsed prickly massage	High frequency vibrations relieve acute pain promptly	
5	Arm fatigue	Tapping massage (2)	Promote Blood circulation with different stimulation	
6			Different stimulation promote circulation of blood and body fluid in the limbs	
7	Back pain or lower back stiffness	Fast tapping/prickly massage	A low frequency to promote blood circulation and relieve pain (neuralgia)	
8	Stiff muscles, numbness	Very fast tapping/prickly massage	A low frequency to promote blood circulation. This program is effective over a long period	
9	Various Symptoms	Pulse prickly massage (2)	Relieves stiffness, pain and fatigue	
10	Various Symptoms	Fast tapping with pulse massage	Relieves stiffness, pain and fatigue	







# **FUNCTIONS AND PROGRAMMES**

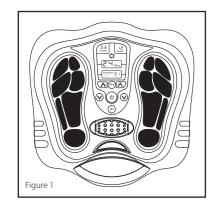
# ELECTROFLEX OUTPUT WAVE FORMS



# LCD showing the Intensity Level for feet – maximum 40 Levels LCD showing the Intensity Level for body – maximum 40 Levels LCD showing the Program Indication from 1 – 10 Modes

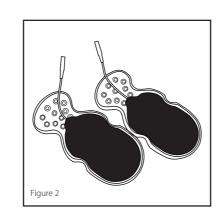
Location	Image	Function
Α	Ů	To switch the unit on or off
В	P+	Choose from one of the 10 pre-programmed massage programs ~ Upward
С	P-	Choose from one of the 10 pre-programmed massage programs ~ Downward
D	٨	Increase the output intensity of foot (BAND 1) FROM 1-40 LEVEL
F	<b>%</b>	Decrease the output intensity of foot (BAND 1) FROM 1-40 LEVEL
G	٨	Increase the output intensity of body (BAND 2) FROM 1-40 LEVEL
Н	V	Decrease the output intensity of body (BAND 2) FROM 1-40 LEVEL

#### **Electrode Area**



On the device (Figure 1) the black colour area on the device which is the electrode area for the sole.

On the gel pad (Figure 2), the black colour area on the sticky part is the electrode area for the body, size is 5 cm x 9 cm.



#### **Foot Electro Therapy Massage**

We will examine the operation in more detail later in your instructions but the principle is relatively easy to understand. There are two separate controls/channels, one for the feet, being band 1 and one for the pads being band 2. Place your feet on the foot plates, turn on ElectroFlex with the central on/off switch (hold down for 3 seconds to activate), choose one of the 10 different treatment programmes and start to increase the intensity to a comfortable level. There are 40 different levels. When you start to feel the mild electro-therapy will depend on your own nerve sensitivity. Certain individuals will feel nothing until the intensity is up at a high level, others will feel the stimulation at relatively low levels. This is completely normal.

#### **Body Toning**

If you choose to tone muscle groups or target pain in other areas of your body the ElectroFlex comes with four gel pads. These can be used to tone arms, hips, thighs, abs or buttocks or target neck muscle or back pain.

#### The Outputs have no DC Component

#### **Output Waveform**

BAND 1 – SOLE MASSAGER	(during 1 kΩ load)

MODE	OUTPUT
1	Pulse rate 6Hz with 1 second in left side , right side off time 1 second then Pulse rate 6Hz with 1 second in right side , left side off time 1 second. A cycle repeating.
2	Pulse rate 12Hz- 80Hz with 12 seconds and off time in 1 sec. A cycle repeating.
3	Pulse rate 7Hz with 30 seconds and off time in 1 sec. A cycle repeating.
4	Pulse rate 7Hz- 25Hz with 8 seconds and off time in 1 sec. A cycle repeating.
5	Pulse rate 12Hz- 80Hz with 11 seconds and off time in 1 sec. A cycle repeating.
6	Pulse rate 12Hz with 12 seconds and off time in 1 sec. A cycle repeating.
7	Pulse rate 11Hz-80Hz with 15 seconds and off time in 1 sec. A cycle repeating.
8	Pulse rate 12Hz with 10 seconds and off time in 1 sec. A cycle repeating.
9	Pulse rate 12Hz with 13 seconds and off time in 1 sec. A cycle repeating.
10	Pulse rate 12Hz- 80Hz with 10 seconds and off time in 1 sec. A cycle repeating.

#### BAND 2 – BODY MASSAGER (during 1 kΩ load)

MODE	OUTPUT
1	Pulse rate 13Hz-80Hz with 13 seconds and off time in 1 sec. A cycle repeating.
2	Pulse rate 13Hz-80Hz with 18 seconds and off time in 1 sec. A cycle repeating.
3	Pulse rate 13Hz-80Hz with 19 seconds and off time in 1 sec. A cycle repeating.
4	Pulse rate 13Hz-80Hz with 7 seconds and off time in 1 sec. A cycle repeating.
5	Pulse rate 13Hz-80Hz with 16 seconds and off time in 1 sec. A cycle repeating.
6	Pulse rate 13Hz-80Hz with 10 seconds and off time in 1 sec. A cycle repeating.
7	Pulse rate 13Hz-80Hz with 17.6 seconds and off time in 1 sec. A cycle repeating.
8	Pulse rate 12Hz with 10 seconds and off time in 1 sec. A cycle repeating.
9	Pulse rate 12Hz with 16 seconds and off time in 1 sec. A cycle repeating.
10	Pulse rate 12Hz-80Hz with 11 seconds and off time in 1 sec. A cycle repeating.







# ELECTROFLEX OUTPUT WAVE FORMS

# HOW TO OPERATE



Foot Massager EMS Waveform and Pulse Width Diagram below: during  $1k\Omega$  load connected with the sole electrode part

Mode 1
Waveform

A=B=C=300uS
a=b=160uS
Max. Voltage: 50V (single phase)

Mode 2
Waveform

A=B=C=300US
a=b=160US
Max. Voltage: 50V (single phase)

Mode 3
Waveform

A=B=C=300uS
a=b=160uS
Max. Voltage: 50V (single phase)

Mode 4
Waveform

A=B=C=300uS
a=b=160uS

A|a|B|b|C

Mode 5
Waveform

A=B=C=300uS
a=b=160us
a=b=160us
AaB b C

Mode 6 Waveform

A=B=C=300uS a=b=160uS

Aa B b C

Aa B B b C

Aa B B b C

Mode 7
Waveform

A=B=C=300uS
a=b=160uS

AAB Rolc

AAB Rolc

Mode 8
Waveform

A=B=C=300uS
a=b=160uS
Max. Voltage; 50V (single phase)

Mode 9
Waveform

A=B=C=300uS
a=b=160uS
Max. Voltage: 50V (single phase)

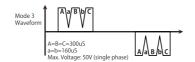
ode 10 aveform

A=B=C=300uS a=b=160uS

Max. Voltage: 50V (single phase) Body Massager EMS Waveform and Pulse Width Diagram below: during  $1k\Omega$  load connected with the sole electrode part

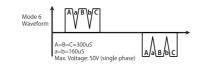


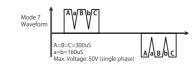


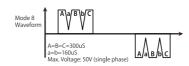
















#### For feet - BAND 1

In order to increase the conductivity we recommend that you dampen the soles of your feet.

- **1.** Place your bare feet onto ElectroFlex (do not wear socks).
- 2. Press (and hold down for 3 seconds) the on/off button, the LCD screen will light up in blue. The program will show 01 and both band shows 00, which means the device is in standby mode. (See Figure 3).
- 3. Select the program you wish to use, there are 10 different programs which are indicated on the LCD display. Select the program by pressing "P+" and "P-". (See Figure 4).

Gently increase intensity setting by holding down the button "^". Or decrease intensity setting by holding down the button "~". The intensity level is adjustable between 0 and 40. (See Figure 7).

In order to let the user feel the stimulation gradually increase the intensity to a comfortable level by holding down the "^" intensity button. Those who suffer with poor circulation may not feel anything until reaching a higher level of intensity. There are 40 output levels. When you reach your desired intensity level release the button, the icon will blink. To stop the blinking and maintain the intensity press the "^" button 5 times.

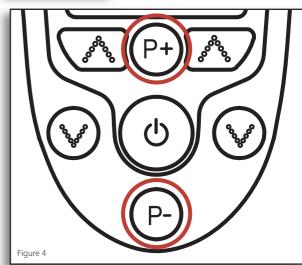
**4.** You can adjust the program anytime. Once re-adjusted the intensity will return to "0". So you will have to increase the intensity to the desired level. The LCD will also show the level which you have selected. (See Figure 5).

To terminate the massage period, you can turn off the unit anytime by pressing the on/off button for 3 seconds.

The unit has an auto timer, it will start to count down from 25 minutes of massage and switch off automatically.



igure 3



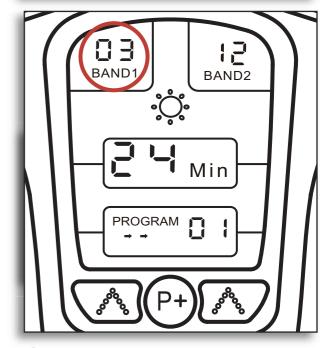


Figure 5







# HOW TO OPERATE



#### For Body – BAND 2

#### Using the Gel Pads

Wash and dry skin before use. Connect the output wire to the gel pads. Connect the other end of the output wire to the output jack on ElectroFlex. Remove the protective film from the adhesive pads. Attach the gel pads to the skin. Press the on/off button for 3 seconds to turn on the unit and adjust the stimulating mode and output intensity to the desired level. (The display will show the mode and level that you selected and start to count down).

- **1.** Plug the 2 cables into the cable jack at the side of the unit. (See Figure 6).
- 2. Connect pin of the cable to the gel pad. (See Figure 7).
- **3.** Remove the protective film from the gel pad, and attached the 4 pads to the area of the body you wish to treat.
- **4.** Repeat operation as in foot instructions, adjust the intensity using Band 2.
- **5.** Gently increase the intensity setting by pushing the button "\sqrt{"}. Or decrease intensity setting by pushing the button "\sqrt{"}. (See Figure 8).

The LCD will show the level selected (see Figure 9). When you reach the desired Level the icon will blink. To stop the blinking and maintain the intensity press the "^" button 5 times.

**6.** To terminate the massage period, turn off the unit at anytime by pressing the on/off Button for 3 seconds.

The unit has an auto timer, it will start to count down from 25 minutes of massage and switch off automatically.

If you want to use with 2 gel pads only, then you must connect 1 gel pad to Jack A and 1 gel pad to Jack B.



#### Care of your Gel Pads

Never stick two adhesive pads to each other. Keep the adhesive gel pads clean, do not expose them to high temperature or direct sunlight. If the electrode gel pads are insufficiently adhesive or dirty, wipe with a damp cloth or change for new ones. Replacement parts will be available directly from BioEnergiser or your distributor.

Do not clean the electrode gel pads with any chemical.

ALWAYS try and protect the gel pads store on the gel pad protector when not in use, as illustrated.

#### Suggested Gel Pad positioning













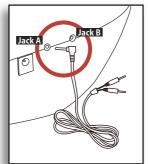
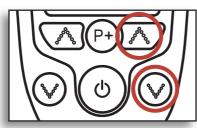




Figure 6

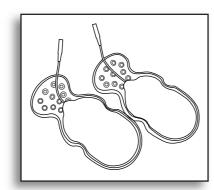
Figure 7



igure 8



Figure 9



#### Connect with the supplied AC/DC Power Adapter

Plug the DC plug of the power supply into the socket on the side of ElectroFlex (see Figure 10. Plug in power adaptor to a suitable wall socket. (Make sure that the input voltage of the wall socket is suitable for the supplied adaptor).

#### **Inserting Batteries**

If you want to use the ElectroFlex with battery power instead of the supplied main adaptor, the battery compartment is located on the underside of the unit.

Remove the battery cover from the unit by removing the screw with a screwdriver. Insert three new 1.5V size C batteries with the + and - marks correctly aligned.

**Note on batteries:** Do not mix different types of batteries or an old battery with a new one. To prevent the risk of leakage or explosions, never recharge the batteries, apply heat or take them apart.

When not using batteries, remove them to prevent battery drainage. If liquid leaks from the batteries, throw them away. Thoroughly clean the battery compartment with a dry cloth.

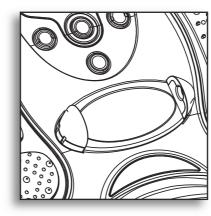
# 

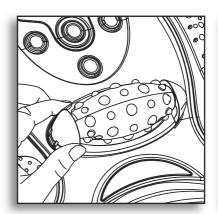
#### **Changing the Sole Massage Roller**

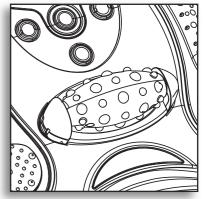
#### The sole massage roller is interchangeable.

The roller is fixed into position between the two locking locators. These push in to the main body of the ElectroFlex to hold the sole massage roller firmly in place.

To Remove the locking locators you will need to squeeze the locator on the outside face this will push the locking locator out of its fixed position and allow you to remove and change the roller.













## CIFANING

# TROUBLESHOOTING AND MAINTENANCE



#### Electrode Gel pad:

- When not in use, store the electrode gel pads on the plastic pad protectors provided at room temperature.
- Keep the electrode gel pads clean and dust free in a dry location, keep away from oily or sticky objects. The life of the electrodes varies depending on skin conditions, storage, amount of use, type of stimulation, and stimulation site. Usage may be extended by carefully cleaning the gel surface with a soft damp cloth. Do not get the cables wet when cleaning.
- For hygiene purposes this is a single patient use only device.
- The adhesive will become less effective if the gel pad is contaminated. Wash the pads under slow running water for about 2 - 3 seconds. Caution! Do not use hot water. Do not wipe the adhesive surface. Let the adhesive surfaces of pads air-dry. Adhesive surface sides up during drying.
- To sterilize the foot plate use a mild antiseptic solution.
- Do not use tissue, cloth etc. to scratch the electrode surface.
- Do not use anything abrasive to clean the electrode pads this will damage the pad surface.
- Do not frequently clean the pads, and do not use detergent or hot water to clean the electrode gel pads.



#### Main Device

- Turn off the power, remove the adaptor and the electrode gel pad from the unit for storage in correct way.
- Always keep the main device clean, by using a soft cloth to clean the surface of the unit.
- To clean the foot plates use a soft, damp cloth, dry thoroughly after cleaning.
- To clean the main unit use a soft, damp cloth, dry thoroughly after cleaning.
- Do not spill liquid on the device.
- Do not immerse the device in water.
- Do not clean with chemicals.
- Store in a dry, dust free location in a temperature between 10°C to 40°C and 30% to 90% relative humidity.



#### **Safety Precautions**

- Do not open the device or repair it yourself. This will invalidate your warranty and may cause serious harm.
- If the device malfunctions, disconnect it from the power source and contact your selling agent as soon as possible.
- Use only the accessories supplied by the manufacturer.
- Use the device only for its intended purpose.
- Do not expose the device to extreme heat.
- Do not overload the electrical outlet.
- Do not stand on the machine. Use it when sat down only.
- Do not spill liquid on the device or its accessories

The warranty is void if the product has been altered, misused or abused. We will not take any responsibility.

#### **Regulatory Certification**

UK/Europe Class IIa medical device

**C€**<sub>0473</sub>This symbol indicates that the unit meets the basic requirements set by the CE Directive 93/42/EEC concerning medical devices.

ElectroFlex complies with the WEEE Directive.



Disposal of the device in accordance with EU regulations applicable at the place of operation. Dispose of at public collection points in EU countries.

ISO 13485 – Manufactured under the international quality management standard for medical devices.

SYMPTOM	CAUSE	ACTION		
Device will not turn on	Batteries inserted in wrong direction  The adaptor is not connected to the	Insert batteries in correct direction or check the battery is not discharged Check the connection of the adaptor jack is properly		
	device correctly	connected to the device and in the wall socket		
Power turns off too soon	Gel pads not attached correctly to the skin	Attach Gel pads correctly to the skin		
Power turns off while using then the batteries are weak/exhausted then the batteries are weak/exhausted treatment period of 25 minutes is over and power turns off automatically lf you are using the body massager, the cable may be damaged				
It is difficult to attach gel pad to the skin  Transparent film not peeled off Gel pad applied immediately after washing Adhesive surface of gel pad damaged The gel pads get dirty and lose their adhesive/stickiness		Peel off film on the adhesive surface of gel pad Allow gel pad to dry  Replace gel pad Replace gel pad or clean the gel pad with a small drop of water rubbed onto the sticky side of the electrode pad		
Adhesive surface of gel pad during perspiring Gel pad washed too long and/or too frequently Gel pads stored under high temperature, high humidity or direct sunshine		Chill the gel pad in a domestic fridge for 3-4 hours		
It is difficult to feel stimulation  The soles of your feet are too dry  Your soles are not placed on the foot plates correctly  Gel pads not attached correctly to the skin  Gel pads overlap each other  Electrode cord not connected correctly  Applied intensity too weak		Dampen the sole of your feet this will increase conductivity Ensure both of your soles are aligned on each foot plate correctly Attach gel pad firmly to the skin  Reattach Long Life pads with no overlap Connect electrode cord correctly Increase the intensity by pressing the intensity buttor		
The skin turns red or the skin dirty or dry feels irritated Adhesive surface of Gel pads damaged		Wash adhesive surface of gel pads carefully whilst unplugged from machine and leave to dry thoroughly		

#### Hygiene

After using the product

- Clean the foot plate area with a soft, damp cloth and a mild antiseptic solution.
- Store the electrode gel pads on the protectors provided.

#### Storage

For more information about BioEngergiser Products visit our website at: www.bioenergiser.com

Keep the product clean and dust free store within the following condition.

Storage temperature and humidity -10°C to 60°C, 10% to 95% RH

Operating temperature and humidity 10°C to 40°C, 30% to 90% RH







# TECHNICAL SPECIFICATIONS

# WARRANTY



Product Name	ElectroFle	ElectroFlex - Circulation Massager Electrical Stimulator		
Model	BE109			
Power Supply	4.5V DC c	or 3 x 1.5V Alkaline Batteries Type C*		
Supplier of Adaptor	Golden P	rofit Electronics Ltd.		
Adaptor Input	230V~50	Hz 100mA		
Model Number of Adaptor	SY-04010	l-BS		
Adaptor Input	230V~50	Hz 100mA		
Adaptor Output	4.5V DC 1	00mA 0.45VA		
Battery Life	''	Approx 1 Month: When used 25 minutes a day continuously		
Frequency Generation	Approx. 1	Approx. 1Hz to 80Hz		
Power Consumption	0.45W	0.45W		
Maximum Output Voltage	U < 50V (	$U < 50V$ (during $1k\Omega$ load)		
Maximum Output Current	I < 10mA	I < 10mA (during 1kΩ load)		
Operating Temperature and Humidity	10°C to 4	10°C to 40°C, 30% to 90% RH		
Storage Temperature and Humidity	-10°C to	60°C, 10% to 95% RH		
Main Unit Dimensions	430 (L) x 4	430 (W) x 150 (H)mm		
Weight Approx.	1900g			
Package Contents	Quantity	Parts		
	1	ElectroFlex - Circulation Massager Electrical Stimulator		
	1	1 AC/DC Adaptor		
	1	1 Sole Massage Roller		
	2 Cable Wire for Electrode Gel Pads			
	4	Electrode Gel Pads		
	2	Plastic Gel Pad Protectors		
	1	Instruction Manual		

#### Accessories:

- Only use original accessories. Do not substitute with non approved parts
- Check the contents are correct



Your ElectroFlex is covered by a one year manufacturers warranty against fault or defect, from the date of purchase - please retain your proof of purchase as a copy will be required to authenticate any warranty repair.

This limited warranty does not cover any damage due to accident, misuse, abuse or negligence. This limited warranty is valid only if the product is used with the equipment specified in the product instruction manual.

The warranty extends only to the original purchaser and terminates on transfer of ownership. Specifications are subject to change without notice. If a fault occurs and your ElectroFlex does not operate satisfactorily, do not open the device or repair it yourself, please contact your selling agent for instructions. The dealer has the right to repair or replace faulty items at their discretion.

Our full terms and conditions are available on our website: **www.bioenergiser.com** 





<sup>\*</sup> Batteries are not included



# IMPORTANT INFORMATION



#### **Electro Magnetic Compatibility (EMC)**

- **1.** ElectroFlex needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the ACCOMPANYING DOCUMENTS.
- 2. Portable and mobile RF communications equipment can affect ElectroFlex.
- **3. Warning** that the use of accessories, transducers and cables other than those specified with the exception
- of transducers and cables sold by the manufacturer of the ElectroFlex as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the ElectroFlex.
- **4. Warning** the ElectroFlex should not be used adjacent to or stacked with other equipment.

#### Guidance and manufacturer's declaration – electromagnetic emissions

The ElectroFlex is intended for use in the electromagnetic environment specified below. The customer or the user of the ElectroFlex should assure that it is used in such an environment.

Emissions	Compliance	Electromagnetic Environment Guidance
RF emissions CISPR 11	Group 1	The ElectroFlex uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The ElectroFlex is suitable for use in all establishments, including domestic
Harmonic emissions IEC 61000-3-2	CLASS A	establishments and those directly connected to the public low-voltage power supply network
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	that supplies buildings used for domestic purposes.

#### 5. Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The ElectroFlex is intended for use in the electromagnetic environment specified below. The customer or the user of the ElectroFlex should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1kV for input/output lines	±2 kV for power supply lines ±1kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) and neutral	±1 kV line(s) and neutral	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5s	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5s	Mains power quality should be that of a typical commercial or hospital environment. If a dips or an interruption of mains power occurs, the current of the ElectroFlex may be dropped off from normal level, it may be necessary to use uninterruptable power supply or a battery
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	Not applicable	Not applicable

**NOTE:** UT is the AC mains voltage prior to application of the test level





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# IMPORTANT INFORMATION



#### 6. Guidance and manufacturer's declaration – electromagnetic immunity

The ElectroFlex is intended for use in the electromagnetic environment specified below. The customer or the user of the ElectroFlex should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
Conducted RF IEC 61000-4-6	3V/ms 150kHz to 80MHz	3V/m	Portable and mobile RF communications equipment should be used no closer to any part of the ElectroFlex, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
			Recommended separation distance
			$d=1,2\sqrt{P}$
Radiated RF IEC 61000-4-3	3V/ms 26MHz to 2.5GHz	3V/ms	$d = 1.2 \sqrt{P}$ 80MHz to 800MHz
	10V/m 26MHz to 2.5GHz		$d = 2.3 \sqrt{P}$ 80MHz to 2.5GHz
			Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation.
			Distance in metres (m).
			Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range (b).
			Interference may occur in the vicinity of equipment marked with the following symbol:

**NOTE 1:** At 80MHz and 800MHz, the higher frequency range applies.

**NOTE 2:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

(a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the ElectroFlex is used exceeds the applicable RF compliance level above, the ElectroFlex should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the ElectroFlex.

(b) Over the frequency range 150kHz to 80MHz, field strengths should be less than 3V/m.

#### 7. Recommended separation distances between

#### portable and mobile RF communications equipment and the ElectroFlex

The ElectroFlex is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the ElectroFlex can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the ElectroFlex as recommended below, according to the maximum output power of the communications equipment.

Rated maximum	Separation distance according to frequency of transmitter			
output power		m		
of transmitter	150 kHz to 80 MHz 80 MHz to 800 MHz 800 MHz to 2.5 GHz			
W	$d = 1.2 \sqrt{P}$	$d = 1.2 \sqrt{P}$	$d = 2.3 \sqrt{P}$	
0.01	0.12	0.12	0.23	
0.1	0.38	0.38	0.73	
1	1.2	1.2	2.3	
10	3.8	3.8	7.3	
100	12	12	23	

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

**NOTE 1:** At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

**NOTE 2:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.









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ELECTRICAL STIMULATOR